Functional abundance of species – a new concept in study of trait variability

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Abstract

1. A new concept of functional abundance of species is presented. The absolute and relative functional abundance is mainly aimed at analyzing functional variability of communities based on intraspecific trait variation. 2. Functional abundance of species in a given community was estimated for two models of proportional and nonproportional random sampling of individuals of each species for determining trait profiles of the selected individuals. The intraspecific trait variabilities obtained for each separate species were incorporated together with taxonomic abundance of those species to assess species functional abundance. 3. Two examples demonstrate the pipeline of calculations of the functional abundance for the two corresponding models. Possible applications of the functional abundance and related technical issues are briefly discussed.

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`Functional abundance with Tables 1 and 2 Ecology Letters FINAL 2025_01_20.docx` available at https://authorea.com/users/802128/articles/1261716-functional-abundance-of-species-a-new-concept-in-study-of-trait-variability